

seo di Piante rare della Sicilia, Malta, Corsica, Italia, Piemonte e Germania, &c. di Don Paolo Boccone, &c. with additional Remarks by Mr. John Ray, F.R.S. IX. An Index to the Philosophical Transactions, from Numb. 236, to 247. inclusive.

- I. *Part of a Letter from Mr. Geoffroy, to Dr. Sloane, from Paris, 21 Dec. 1698. N.S. concerning the Mineral Waters at St. Amand near Tournay and Valenciennes.*

THere has been found a Mineral Water, called, *St. Amand's Water*, which has been very much in use the last Summer and Autumn, in all sorts of Sicknesses, rather for its Novelty, than for its great and extraordinary Properties.

Fifteen Years ago the Country-men began to seek some Vertues in that Water, but since the end of the last War, they have imputed to it the greatest Properties. Most sick Persons are willing to drink some, thinking to swallow in great Glasses their Health with that Water. Abundance of People have been upon the Place for drinking it there, or for bathing in its Mud, and others have been contented to bring some to their Houses to drink.

The Curiosity of some Persons has engaged me to make some Experiments upon that Water; and here is an Account of the Mineral Fountain, of the Water's Quality, of the Experiments upon it, and of the Vertues that they attribute to it.

This Mineral Water is called *St. Amand's Water*, because its Spring is in the Land depending on the Abby of the same Name, of the Order of *St. Benedict*, in the Diocese of *Tournay* in *Flanders*. This Spring is situated Two Miles from that Abbey, Four Leagues from *Tournay*, Three Leagues from *Valenciennes*; but the Fountain is called particularly, *La Fontaine du bouillon*, for the impetuous boiling of that Springing Water.

This Fountain is situated in a shallow and Marshy Ground; the Basin of the Spring is Four hundred and fifty Foot square, there is in the bottom of that Basin the Mud of Twenty Foot

Foot deep; beyond that they find the Sand, which sometimes is very moving, and at some other times is very firm. Very often this Fountain casts up a great Quantity of Sand: and last Year in a little time it cast up more than Sixteen Cart Loads of it, by the which all the Bason was bordered.

There is to be found Three sorts of Earth, the first and superficial is black, and burns as *Turf* with the same Smell. The Second is white, and the Third has the same Colour as the Slate. These Two last sorts of Earth do give by *Lixivium*, a Salt like *Sal gemmae*.

This *St. Amand's Water* in its Spring is clear and luke warm, and appears much hotter at Night and in the Morning, than the rest of the Day. It has the Smell and Taste like standing Water. If it is exposed to the Air, it loses its Smell and its Taste in a short time. By that Facility to lose its Taste and Smell, one may judge that it has a Sulphur very volatile; and for that great volatility and subtilty it is almost impossible to make any Experiments upon it.

These are the Experiments that I have made upon the Water that has been brought to me.

This Mineral Water has the same Weight as the *Seine River-water*. It altered not the Colour of Sirrup of Violets, nor the Tincture of *Turne Sol*, Lime Water, the Oyl of Tartar, the Volatile Spirit of *Sal Armoniac* and Harts Horn have whited that Water, and have made in it a light Coagulum.

This Water, mixt with the Dissolution of Armoniack Salt, has not given any smell. It has not alter'd the Infusion of Galls. Mingled with the Solution of Vitriol, has troubled it a little, and has given a greenish Colour, and at length it precipitated a Yellow Powder.

Acid Spirits have not fermented at first with that Water, but afterwards it has made some little Bubbles, which remained to the side of the Glasses, wherein were contained the Liquors.

I have distilled five pints of that Water; the distilled Water has not had any Taste nor Smell, and it has not changed the Tincture of *Turnsol*, neither the Lime-Water. There remained from that Five Pints (or One hundred and sixty Ounces) Seventy Grains of Residue; the which, by *Lixivium* has given to me Fifty-five Grains of grey Earth, and Fifteen Grains of white Salt, almost like *Sal gemmae*.

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The residue of the evaporated Water put upon the burning Coals, has not cast any Smoak, neither has made any Detonation; the Spirit of Nitre pour'd upon it, has very much fermented; the Spirit of Wine has not extracted any Tincture from that residue.

One may conclude by all those Experiments, that this Water has not any Acidity, it participates not of Vitriol nor of Alum; and there is in it but a little Quantity of the white Earth, and less also of Salt very like Sea-Salt.

They are the parts of Earth and Salt, which shew themselves in the Mixture of the Lime-Water, &c. of fixed or volatile Alcalis.

They are the same parts which begin that light Fermentation in the Mixture of Acid Spirits; but that Fermentation is imperfect because of the little Quantity of the Earth, which is drowned in so great a Quantity of Liquor; in effect when the Water is evaporated, the Acid Spirits do ferment very much with the residue.

It appears by the Smell of that Water, that it contains a Sulphur very subtle, which dissipates its self very easily, and which is not sensible in the Experiments. 'Tis nevertheless to be attributed to that Sulphur, the principal Effects which they do attribute to that Mineral Water, as of helping in the Palsy, &c. in other sorts of Distempers where the nervous Gender is attack'd, in Short-breath, and in all Affections of the Lungs; and of remedying many other Infirmities which are caused by the sharp Ferments, the which are sweetned by that Water. For the other Properties of it, as of purging, of taking away Obstructions, of tempering the hot Intrals, &c. it may have the same Effects with common Water being drunk abundantly.

One may drink many Glasses of this Water beginning by Four, Six or Eight every Morning, and augmenting till Twelve, Eighteen, Twenty or more, according as the Stomach is able to support it. This Water passes readily by Urine, and many Persons are purg'd by it. Sometimes one may mix with it some Diuretick Salt, to make it pass more freely, and for rendering it more de-obstructive. At other times one may put some Manna or other things for making it more purgative. One may wash also in the Mud of that Fountain, according to necessity.